Sony Ericsson

Component Replacement

- electrical -

Satio

U1a,U1i, U_1

1230-3675 Rev 1

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For general information about electrical repair related issues, refer to 1220-1336: Generic Repair Manual - electrical

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1 Replaceable Components

EXPLANATION OF ABBREVIATIONS USED IN THE COLUMN 'COMMENTS' BELOW

COMPONENT LOCATION
P = Primary side
S = Secondary side

MOISTURE SENSITIVITY LEVEL
MSLX (X = 1, 2, 2A, 3, 4, 5, 5A or 6)

For more information on moisture sensitivity levels:
Refer to 1220-1336: Generic Repair Manual – electrical, section 'Moisture & Baking'!

REPAIR METHOD
HA = Hot Air (removal & mounting)
ST = Soldering Tool (removal & mounting)
HA/ST = Hot Air for removal - Soldering Tool for mounting
BGA = BGA Station
BH = Bottom Heater

ADDITIONAL INFORMATION
⇨**1** (2,3,4, etc.) = Proceed to 'Additional Repair Info' for further instructions in the indicated section(s).

CALIBRATION
C = Calibration of the phone is required after replacing the component

Calibration to be done by authorized centers only!

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Position	Component	Part no.	Comments
B1500	Osc TCXO 16.368 MHz	1201-6457	P HA
B2000	Crystal 32768Hz	RTM501911/2	P HA C
B4000	Vibrator	1213-1973	S BGA
C3011	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	RJC5163237/1	P HA⇨1
C3013	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	RJC5163237/1	S HA⇨2
C4036	Capacitor 70.0 mF 3.3 V	RJE3551335/7	P HA
D5500	Microphone	1210-7410	S HA⇨2
E1003	Shield Can Closed	1219-5424	P HA
L1404	Ind WW 1.5 nH +/- 0.1nH 0402	1206-9867	P HA
L1502	Inductor 2.2 nH +/-0.2 nH	1201-7614	S HA⇨3
L3000	Inductor	REG70618/20	P HA⇨1
L3001	Ind Chip 0, H	1200-6898	S HA⇨2
L3002	Inductor	REG70618/20	P HA⇨1
L3003	Inductor	REG70618/20	P HA⇨1
L3004	Inductor	REG70618/20	P HA⇨1
L4000	120ohm 0603 2A 50mohm Bead	REG70605/15	P HA
L4002	Ind WW 4.7 uH +-20% 3X2.8X1	1200-0119	P HA
L4005	Ind WW 4.7 uH +-20% 3X2.8X1	1200-0119	P HA
L4010	Ind WW 10, uH	REG7245512/1M	P HA
L4101	Ind Chip 1.0 uH +/-20% K2520	1201-5637	P HA
L4130	Ind WW 1.5 uH 30% 3.6X2.8X1.2	1201-3412	P HA
L4131	Ind Chip 1.0 uH +/-20% K2520	1201-5637	P HA
L4132	Ind Chip 1.0 uH +/-20% K2520	1201-5637	P HA
L5506	Inductor 22.0 nH 3%	REG9030040/1	S HA⇨4
L5507	Inductor 22.0 nH 3%	REG9030040/1	S HA⇨4
N1000	IC Linear	1203-5870	P HA⇨10
N1001	Tiger 1,2,5	1218-1883	P BGA C
N1001	Tiger 1,8	1218-1888	P BGA C
N1400	Mod Radio Bluetooth + FM YFV, WLAN 5.0 x	1219-6481	P BGA
N1401	Mod PA WLAN 3.0 x 3.0 x 0.50mm	1222-5645	P HA
N1403	IC YFF-6	1215-5351	P HA
N1500	ASIC GPS5350 WSP	1201-7557	P HA
N2630	ASIC	1216-8137	P BGA
N2631	IC Vreg	1217-3858	P HA
N2632	IC IF WCSP-4	1212-7867	P HA
N2633	IC Vreg	1203-0463	P HA
N2636	IC Vreg PLP1010-4	1201-1568	P HA
N2800	ASIC Accelerometer	1202-1676	S HA⇨5
N2802	IC Vreg PLP1010-4	1201-1568	P HA
N2803	IC IF	1217-1647	P HA
N3000	ASIC Baseband	1201-4120	P HA⇨11
N3002	Diode 6.0 V	RKZ923929/1	P HA⇨1
N3005	IC ESD Prot UDFN 6 2x2 mm	1200-6309	P HA⇨1
N3006	IC IF 2.0 x 2.0 x 0.75 mm uDFN-10	1215-6819	P HA⇨12
N4000	IC Vreg	1218-4589	P HA
N4003	IC Voltage Regulator	1204-5903	P HA⇨13
N4004	IC Lin 1.2 x 1.2 mm FC MLF	1211-9998	P HA
N4150	Step Down Converter 500mA	1208-4678	P HA
N4152	IC Vreg	1213-2244	S HA
N4180	IC WL-CSP 6x4 balls	1212-7979	P HA
N5500	IC Amp	1217-2694	P HA
N5502	ASIC Tjatte3 CSP20	ROP1013074/1	P HA
N5506	IC Amplifier 500mA	1203-4594	S HA

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Position	Component	Part no.	Comments
S2500	Input Switch Slide	RMD80107/2	S BGA
V2101	Switching Diode	RKZ323916/1	S HA⇨6
V2802	Dual N-Channel 1.5V MOSFET	RYN901932/1	P HA
V3001	Diode Zener 16.0 V	1210-9279	S HA⇨2
V3002	Diode	1201-8440	S HA⇨2
V4001	Transistor	RYN122910/1	P HA
V4121	LED White High brightness 1,6x0,8x0,3	1201-0777	P HA
V4122	LED White High brightness 1,6x0,8x0,3	1201-0777	P HA
V4180	MOSFET & Schottky Diode	1201-3866	P HA
V5500	Zenner Diode, ESD protection, 6.1V	RKZ223922/1	S HA⇨4
X1000	Conn Coax Plug 6p RF-probe contact	1203-9688	S BGA
X1010	Connector Leaf Spring	1201-0291	P HA/ST
X1011	Connector Leaf Spring	1201-0291	P HA⇨7
X1012	Connector Leaf Spring	1201-0291	P HA⇨2
X1013	Connector Leaf Spring	1201-0291	P HA
X1014	Connector Leaf Spring	1201-0291	P HA
X1015	Connector Leaf Spring	1201-0291	P HA
X1016	Conn 0p	1218-0391	S HA⇨8
X1017	Conn 0p	1218-0391	P HA
X1018	Conn 0p	1218-0391	P HA
X1401	Conn Coax Plug 6p RF-probe contact	1203-9688	S BGA
X2600	Micro SD connector push/push	1218-6413	P BGA
X2820	Conn BtB 30 pin	1200-1733	P BGA
X2821	Conn BtB Receptacle 50p	1217-3236	S BGA
X2842	Conn BtB 40 pin	1204-7596	S BGA
X2900	Conn BtB Receptacle 46p	1217-3234	S BGA
X2902	Conn BtB Receptacle 16p	1214-7370	S BGA
X3000	Connector	1210-0559	S BGA
X4000	Conn Pogopin 5p	1206-2937	S BGA
Z1500	Filter SAW 1,575 GHz	1201-7439	P HA
Z2500	Filter 150.0 MHz	1221-4986	S HA⇨3
Z2501	Filter 150.0 MHz	1221-4986	S HA⇨9
Z2502	Filter 150.0 MHz	1221-4986	S HA⇨3
Z2503	Filter 150.0 MHz	1221-4986	S HA⇨3
Z2504	Filter 150.0 MHz	1221-4986	S HA⇨3
Z2505	Filter 150.0 MHz	1221-4986	S HA⇨3
Z2506	Filter 150.0 MHz	1221-4986	S HA⇨3
Z2507	Filter 150.0 MHz	1221-4986	S HA⇨3
Z3000	Filter 100, MHz K1210	1201-6833	P HA⇨1

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2 Component Placing

To access the Component Placing document, double-click the icon below.
Applicable for on-screen viewing only – icon not shown on hard-copies.

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3 Repair Actions

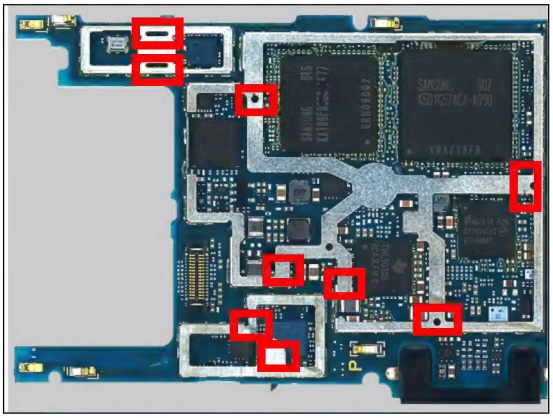
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- the shield can lid has to be removed
- the red symbols show where the frame should be cut to enable rework
- after rework the height of the frame should not be affected
- it should not be visible that rework has been carried out when the lid has been mounted

Primary side



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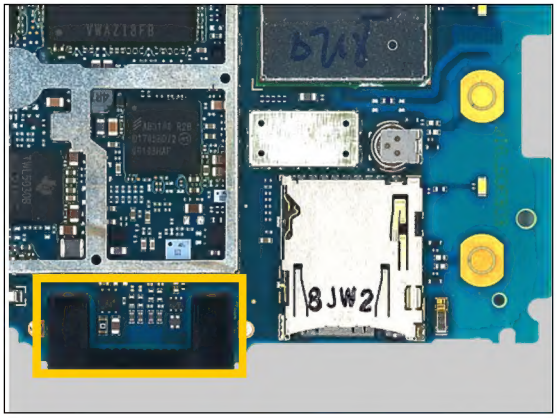
3.2 Additional Repair Info

1

C3011, L3000, L3002, L3003, L3004, N3002, N3005, Z3000

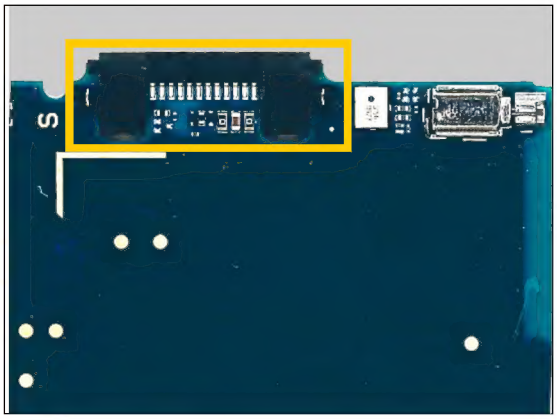
Protect the system connector with capton tape!



2

C3013, D5500, L3001, V3001, V3002, X1012

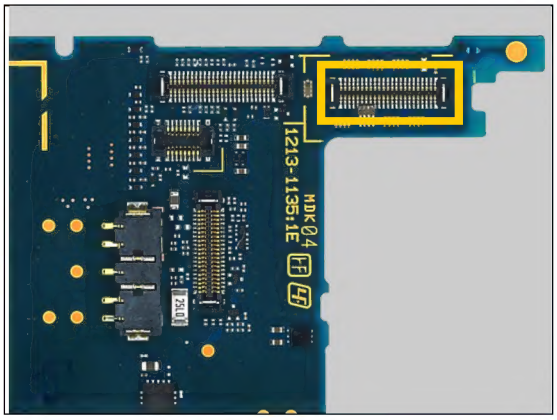
Protect the system connector with capton tape!



3

L1502, Z2500, Z2502, Z2503, Z2504, Z2505, Z2506, Z2507

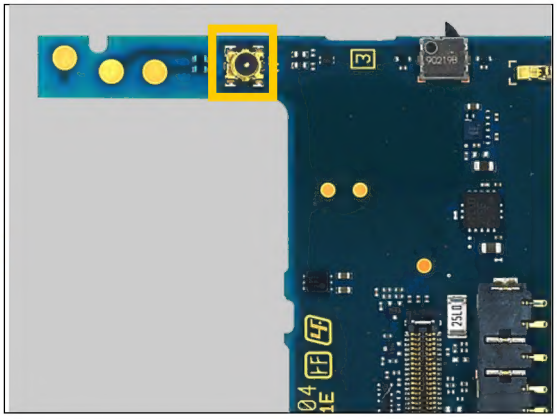
Protect the BtB connector with capton tape!



4

L5506, L5507, V5500

Protect the antenna switch with capton tape!



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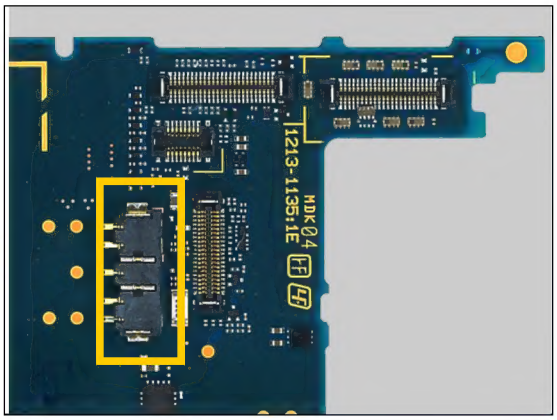
Repair Actions: Additional Repair Info

5

N2800

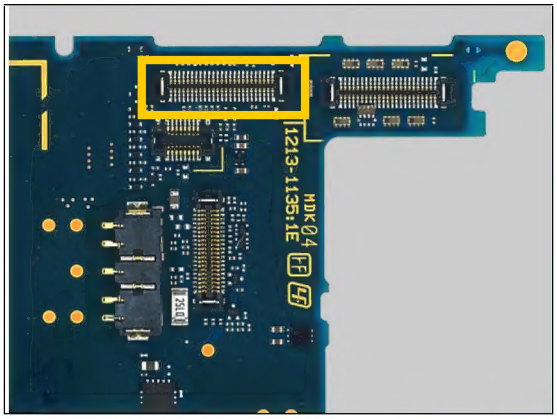
Protect the BtB connector with capton tape!



6

V2101

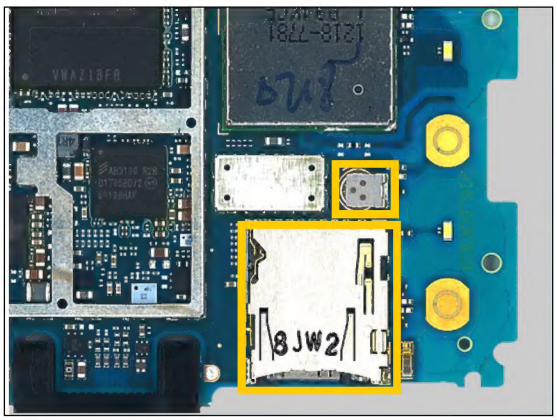
Protect the BtB connector with capton tape!



7

X1011

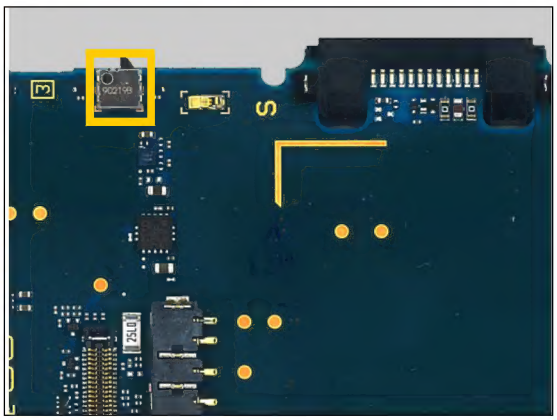
Protect the battery and the sim card holder with capton tape!



8

X1016

Protect switch with capton tape!



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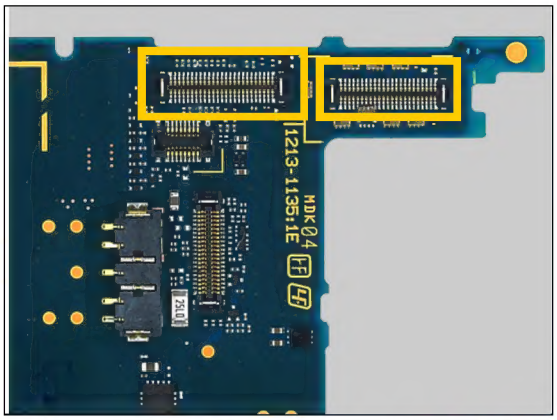
Repair Actions: Additional Repair Info [redacted]

9

Z2501

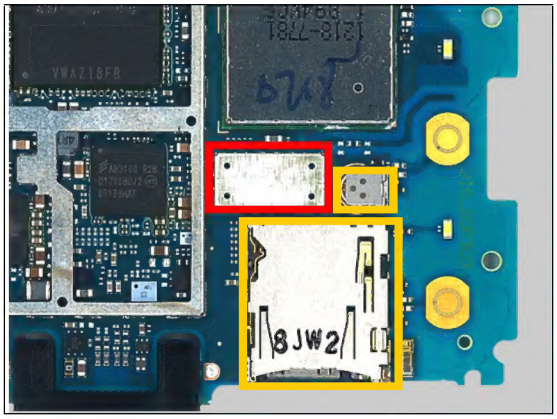
Protect the BtB connectors with capton tape!



10

N1000

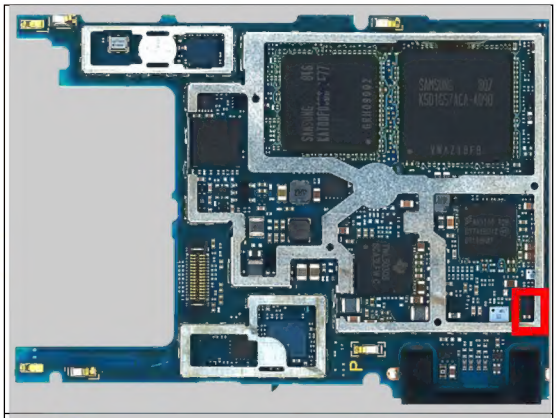
Remove the shield can by HA and protect the battery and the sim card holder with capton tape!



11

N3000

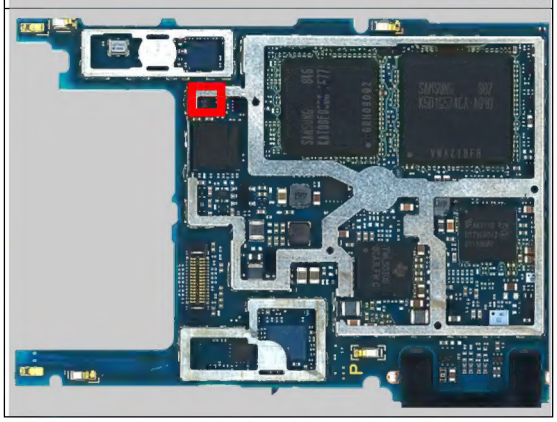
Cut the shield fence as shown!



12

N3006

Cut the shield fence as shown!



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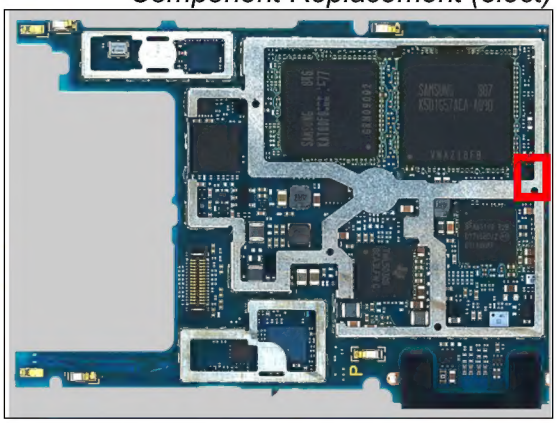

13

N4003

Cut the shield fence as shown!

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Revision History

Rev.	Date	Changes / Comments
1	2009-Oct-14	Initial release

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